

#### Mitt Romney Governor

# COMMONWEALTH OF MASSACHUSETTS OFFICE OF CONSUMER AFFAIRS AND BUSINESS REGULATION

#### **DIVISION OF ENERGY RESOURCES**

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Kerry Healey
Lieutenant Governor

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Director, Office of Consumer Affairs
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David L. O'Connor Commissioner August 5, 2005

Mary L. Cottrell, Secretary Department of Telecommunications & Energy One South Station, Second Floor Boston, Massachusetts 02110

Re: Bay State, D.T.E. 05-27: Response to Information Request

Dear Ms. Cottrell:

On behalf of the Massachusetts Division of Energy Resources, please find attached the responses to the following Information Requests of the Department of Telecommunications and Energy (DTE):

DTE-DOER-1-1

DTE-DOER-1-2

DTE-DOER-1-3

DTE-DOER-1-4

DTE-DOER-1-5

DTE-DOER-1-6

DTE-DOER-1-7

DTE-DOER-1-8

DTE-DOER-1-9

Thank you for your attention to this matter.

Sincerely,

Steven I. Venezia

Deputy General Counsel

Cc:

Caroline Bulger, Hearing Officer (2 copies)

Paul E. Osborne, Asst. Director – Rates and Revenue Requirements Div. (1 copy)

Andreas Thanos, Asst. Director, Gas Division (1 copy)

A. John Sullivan, Rates and Revenue Requirements Division (2)

Service List (1 electronic copy)

#### RESPONSE OF DIVISION OF ENERGY RESOURCES TO THE FIRST SET OF INFORMATION REQUESTS FROM BAY STATE GAS COMPANY

Date: August 5, 2005

Responsible: Alvaro E. Pereira, Manager of Energy Supply and Pricing, DOER

DTE-DOER-1-1

Refer to the direct testimony of Mr. Pereira, at 3. Please explain the meaning of the statement "the relatively riskless nature of gas distribution", and indicate whether the statement specifically applies to Bay State's PBR proposal in the instant proceeding, or to the gas distribution industry in

general.

Response:

The statement refers to a comparison of the gas and electric distribution companies whose earnings are directly impacted by the cost of or electricity supplies versus those companies, such as Bay State, that simply pass through supply costs to customers. The latter group's business is relatively riskless when compared to the former. Bay State's rate proposal further reduces this risk by removing components from the PBR and replacing them with

adjustment mechanisms that guarantee cost recovery.

# RESPONSE OF DIVISION OF ENERGY RESOURCES TO THE FIRST SET OF INFORMATION REQUESTS FROM BAY STATE GAS COMPANY

Date: August 5, 2005

Responsible: Alvaro E. Pereira, Manager of Energy Supply and Pricing, DOER

DTE-DOER-1-2 Refer to the direct testimony of Mr. Pereira, at 3 and Exhibit DOER-AEP-1.

Please demonstrate that there is a statistical relationship between the earnings sharing "bandwidths that have been approved elsewhere" and the "relative

riskless nature of gas distribution" in those jurisdictions.

Response: I have not performed or know of any study that includes a statistical analysis

between the level of risk in a company's operation and the particular ESM

adopted.

It should be noted that approved ESMs are a function of a number of variables and considerations, including other issues unique to the particular rate proceeding that would make such an analysis difficult. Nevertheless, the important point is that companies and businesses that face extreme swings in earnings due to, for example, changing costs, output growth or loss, and competitive pressures, would face a different ESM than companies that do

not face such factors.

# RESPONSE OF DIVISION OF ENERGY RESOURCES TO THE FIRST SET OF INFORMATION REQUESTS FROM BAY STATE GAS COMPANY

Date: August 5, 2005

Responsible: Alvaro E. Pereira, Manager of Energy Supply and Pricing, DOER

#### DTE-DOER-1-3 Refer to the direct testimony of Mr. Pereira, at 4-6. Please:

- (a) provide evidence to show how existing capital or "sunk" costs have been treated in PCI plans in other jurisdictions; and
- (b) provide those "cases where a PBR has been applied to a portion of the Company's costs due to lack of unavailable data."

#### Response:

- (a) The first generation PBR plans for electricity distribution companies in Ontario, Canada feature a mechanism whereby capital costs are treated differently than other cost categories through use of capital-specific indexes (RP-1999-0034 Decision with Reasons). Another example is the use of differential revenue caps for labor O&M, nonlabor, nonfuel O&M, and capital additions to the distribution network by San Diego Gas & Electric in the early 1990s (CPUC Decision 94-08-023).
- (b) Enbridge Gas Distribution in Canada, in effect 2000-2002 was one case (E.B.R.O. 497-01 Decision With Reasons). Other examples can be found in transmission companies' PBR proposals, such as the application of a PBR to O&M by TransConnect, LLC in FERC Docket No. RT-01-15-002.

# RESPONSE OF DIVISION OF ENERGY RESOURCES TO THE FIRST SET OF INFORMATION REQUESTS FROM BAY STATE GAS COMPANY

Date: August 5, 2005

Responsible: Alvaro E. Pereira, Manager of Energy Supply and Pricing, DOER

#### DTE-DOER-1-4 Refer to the direct testimony of Mr. Pereira, at 4-7. Please:

- (a) reconcile Mr. Pereira's statement that "[a] PBR plan is an incentive mechanism that is applied to all costs in order to provide incentives for efficiency gains through investment in and substitution among all inputs (emphasis added)" with his proposal that Bay State's PCI plan should be applied to only O&M costs; and
- (b) discuss how costs, other than O&M costs, should be treated in the PCI plan, and how such treatment would "provide incentives for efficiency gains through investment in an substitution among all inputs."

#### Response:

- (a) Dr. Pereira's statement and proposal are consistent with each other and do not need to be reconciled. Dr. Pereira's proposal for Bay State's PCI includes a PBR that applies to all costs, albeit with different X-factors.
- (b) Non-O&M costs will be under a rate freeze, which is a type of PBR, with the X-factor equal to the rate of inflation. Assuming 0.11% as an appropriate value for the sum of the productivity and inflation differentials implies a consumer dividend of (GDP-PI minus 0.11), which would tend to be much higher than the Company's proposed consumer dividend 0.3. A higher consumer dividend is necessary when a Company has not been shown to be a superior cost performer and thus is expected to improve its cost performance over the life of the PBR plan. By contrast, O&M costs will be subject to a PBR with the X-factor equal to 0.41, as proposed by the Company.

# RESPONSE OF DIVISION OF ENERGY RESOURCES TO THE FIRST SET OF INFORMATION REQUESTS FROM BAY STATE GAS COMPANY

Date: August 5, 2005

Responsible: Alvaro E. Pereira, Manager of Energy Supply and Pricing, DOER

DTE-DOER-1-5

Refer to the direct testimony of Mr. Pereira, at 7. Please discuss how the PCI formula proposed by Mr. Pereira is consistent with (1) Department precedent, and (2) PCI plans in other jurisdictions. Provide evidence to support your answer.

Response:

See response to DTE-DOER-1-4 and DTE-DOER-1-3. In Massachusetts, there has been use of a price freeze as one form of incentive regulation, such as for Bay State after 1998. In addition, there have been different PCIs applied to different cost components, as described in DTE-DOER-1-3. In sum, there is precedent for Dr. Pereira's proposed PCI formula and the use of different X-factors to reflect differing expectations for cost performance over the term of the PBR plan.

# RESPONSE OF DIVISION OF ENERGY RESOURCES TO THE FIRST SET OF INFORMATION REQUESTS FROM BAY STATE GAS COMPANY

Date: August 5, 2005

Responsible: Alvaro E. Pereira, Manager of Energy Supply and Pricing, DOER

DTE-DOER-1-6 Refer to the direct testimony of Mr. Pereira, at 7. Please provide the justification for Mr. Pereira's proposal that "the rest of the Company's costs" be subject to a rate freeze. Discuss the effect(s) that such a proposal will have on the Company's operations, including any effects on service quality and service reliability. Provide relevant economic and financial analyses to support your answer.

Response: The justification for the rate freeze proposal to a portion of the Company's costs is a result of the Company's lack of evidence to indicate that the previous rate freeze had any positive impacts on total costs or costs other than O&M. See Dr. Kaufmann's response to DTE 4-10 and related testimony on cross-examination. The Company has testified that the price freeze that

on cross-examination. The Company has testified that the price freeze that was in place from 1998-2003 had the effect of reducing O&M costs substantially (see Exhibit BSG/LRK-1, p. 12). In fact, there is evidence that usage of capital by the Company actually rose during the price freeze.

The table below compares data for capital input quantities for Bay State (see responses to DTE-4-36, p. 1) to those of the Northeast Gas Distributors (see response to AG-13-2(a), p. 24).

	Bay State Capital Input Quantity Index	Northeast Gas Distributors Capital Input Quantity Index
1993	1784.97	1.078
1998	2078.27	1.181
2000	2178.35	1.209
2003	2207.96	Not available
	Average Annual Growth Rate	Average Annual Growth Rate
1993-2000	2.89%	1.65%
1998-2000	2.38%	1.18%

The data show that the Company used more capital relative to the Northeast Gas Industry.

Though capital usage may not be perfectly related to output, I also provide these figures divided by output quantity measures for Bay State (see response to DTE-4-36, p.2 for quantity indexes) and for the Northeast Gas Distributors (see response to DOER-1-10, Attachment, p. 1 for quantity indexes).

	Bay State Capital Input	Northeast Gas Distributors
	Quantity Index/Output	Capital Input Quantity
	Quantity Index	Index/Output Quantity Index
1993	1784.97	1.0123
1998	1826.25	1.0545
2000	1946.69	1.0564
2003	1853.87	Not available
	Average Annual Growth Rate	Average Annual Growth Rate
1993-2000	1.25%	0.61%
1998-2000	4.10%	0.09%

Using this metric, Bay State used more capital per unit of output than the Northeast Gas Distributors, especially in the post-1998 period.

A price freeze for non-O&M inputs is thus justified to provide incentives to control non-O&M costs.

### RESPONSE OF DIVISION OF ENERGY RESOURCES TO THE FIRST SET OF INFORMATION REQUESTS FROM BAY STATE GAS COMPANY

Date: August 5, 2005

Responsible: Alvaro E. Pereira, Manager of Energy Supply and Pricing, DOER

DTE-DOER-1-7

Refer to the direct testimony of Mr. Pereira, at 9, lines 22-29. Please discuss how Mr. Pereira's proposal provides the Company with sufficient incentives "to pursue productivity-enhancing investments and costs" under the proposed PBR plan if a "75% to shareholders and 25% to ratepayers split should only be applied after any initial savings have been passed to the Company's customers", and "ratepayers should not have to be charged for any deficiencies in earnings due to the relative riskless nature of Bay State's rate proposal."

Response:

The Company will have sufficient incentives to pursue productivity-enhancing investments and costs because they will be able to keep a large portion of savings after initial savings have been passed on to consumers. In addition, it is important to tailor the ESM to the Company's circumstances. Evidence indicates that the Company has done well in terms of its O&M costs, implying that little additional gains would involve extraordinary efforts and/or breakthroughs. If the Company's incentives are geared to capturing the first earnings above the benchmark (rather than earnings after a particular threshold), there is less incentive for the Company to reach for novel sources for cost savings and productivity improvements.

Though it is true that earnings sharing with ratepayers, *per se*, reduces the incentives available to the Company, the Department needs to balance this reduction in incentives with one of the primary goals of incentive-based ratemaking—to reduce costs and return some of the benefits to ratepayers. If ratepayers cannot enjoy the benefits of incentive-based ratemaking, its benefits relative to cost of service ratemaking are diminished or even negative.

Ratepayers should not be liable for downside risk in the Company's earnings for two reasons: (1) Bay State's rate proposal is relatively riskless implying that the likelihood of earnings falling below the approved ROE is quite low, and (2) Bay State is a subsidiary of NiSource and thus does not have a truly independent return on equity or benchmark; the Company would have the opportunity to manipulate reported earnings downward to

make the use of an ESM impractical or require a great amount of prudency review.

# RESPONSE OF DIVISION OF ENERGY RESOURCES TO THE FIRST SET OF INFORMATION REQUESTS FROM BAY STATE GAS COMPANY

Date: August 5, 2005

Responsible: Alvaro E. Pereira, Manager of Energy Supply and Pricing, DOER

DTE-DOER-1-8

Refer to the direct testimony of Mr. Pereira, at 9. Please explain how the earnings sharing mechanism proposed by Bay State "provides the Company with incentives to go after "easy" dollars first and more difficult, revolutionary savings measures last." Give examples of what Mr. Pereira means by ""easy" dollars" and "difficult, revolutionary savings measures".

Responses:

See response to DTE-DOER-1-7. Bay State's proposed ESM or regressive ESMs in general, allow the Company to capture initial earnings above the benchmark first and only permit sharing with ratepayers after the Company has received these initial earnings. This type of earnings sharing mechanism should be geared towards companies that have not been under incentive regulation and have the ability to implement obvious and immediate productivity improvements. Bay State's proposed ESM is regressive which results in the natural incentive structure of motivating easy improvements first and riskier investments with potentially more productivity payoff last. The Company is indifferent to whether savings come from easy or difficult measures and thus will pursue less risky savings first. Such an ESM should not be implemented for Companies who are superior cost performers.

The reference to "easy dollars" and "difficult, revolutionary savings measures" were made without though to specific measures. Rather, the terms were used generically to indicate the risk/reward of different savings measures.

# RESPONSE OF DIVISION OF ENERGY RESOURCES TO THE FIRST SET OF INFORMATION REQUESTS FROM BAY STATE GAS COMPANY

Date: August 5, 2005

Responsible: Alvaro E. Pereira, Manager of Energy Supply and Pricing, DOER

DTE-DOER-1-9

Refer to the direct testimony of Mr. Pereira, at 3 and 9. Please provide the basis for Mr. Pereira's assertion that "the potential for ratepayers to actually capture savings or productivity improvements that would result from a rate-indexing PBR or rate freeze is extremely low." If this is the case, what is the basis for Mr. Pereira's support for "the use of a PBR mechanism in this case"?

Response:

My testimony, at 9, lines 8 to 11, reads as follows:

"The Company's ESM proposal is highly regressive with shareholders receiving all of the first dollars saved and most of the later dollars saved. The proposal is problematic for two reasons. First, the potential for ratepayers to actually capture savings or productivity improvements that would result from a rate-indexing PBR or rate freeze is extremely low."

The assertion that "the potential for ratepayers to actually capture savings or productivity improvements that would result from a rate-indexing PBR or rate freeze is extremely low" refers to the Company's proposed ESM and not the PBR plan. PBRs do not have to include ESMs and ESMs can be designed independently of PBRs, so it is possible to have a well-designed PBR and a poorly designed ESM.

I support use of a well-designed PBR and a well-designed ESM, but not use of a PBR with a poorly-designed ESM. Finally, a poorly-designed ESM is especially harmful the longer the term of the PBR to which it is attached.

In terms of the low probability of capturing savings or productivity improvements, I know of no cases of ratepayer sharing either in Massachusetts or in other jurisdictions with similarly broad bandwidths that have been proposed by the Company. In addition, even if sharing occurs, ratepayers receive a small percentage of excess earnings. For example, assume 10% ROE Benchmark, the table below shows the percentage of excess earnings, defined as earnings above this level, that would go to ratepayers

ROE	Ratepayer % of Excess	
10%	0%	
11%	0%	
12%	0%	
13%	0%	
14%	0%	
15%	5.0%	
16%	8.3%	
17%	10.7%	
18%	12.5%	

As the table shows, the Company would have to earn extremely high returns (18%) in order for ratepayers to begin to enjoy significant sharing in productivity gains. The odds of the Company achieving such high returns are quite low.

To place these figures in dollars, consider that the Company's ratesetting capital structure includes \$214,940,703 in total common equity (Exhibit BSG/PRM-2, Schedule PRM-5, p. 1). According to the Company's proposal, ratepayers would only start sharing after 400 basis points, which amounts to over \$8.6 million. Essentially, ratepayers would only start sharing if the Company were able to cut costs by more than \$8.6 million per year.

Bay State Gas Company

D.T.E. 05-27

#### CERTIFICATE OF SERVICE

I hereby certify that I have this day caused the foregoing copy of the Massachusetts Division of Energy Resources' Response to Information Request in D.T.E. 05-27 to be delivered in hand to the Department of Telecommunications & Energy; and to be served by electronic mail to all parties whose names and addresses appear on the service list in accordance with the requirements of 220 CMR 1.05 of the Department's Rules of Practice and Procedure.

Dated at Boston this fifth day of August 2005.

Steven I. Venezia

Deputy General Counsel

For:

Commonwealth of Massachusetts Division of Energy Resources 100 Cambridge Street, Suite 1020 Boston, Massachusetts 02114